

Western Electric Co., Incorporated,
Engineering Dept.,
New York.

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**METHOD OF OPERATION
SIGNAL CIRCUIT**

Line Or Cord Auxiliary Relay - For Use With Line Circuits Requiring - Grounded
Auxiliary Relays - Alarm Type Fuses In Section - Special "A" Board - Full
Mechanical Power Driven System.

GENERAL DESCRIPTION

1. This circuit provides an auxiliary line or cord signal and when desired, an audible night alarm signal, when used with special "A" operator's cord circuits or magneto cord circuits. The circuit is also so arranged that in case the fuse which protects the auxiliary relay operates, a lamp will be lighted at the section in which the relay is located and also a lamp will be lighted at the main alarm board.

2. The auxiliary signal circuit is at the main alarm board, which in association with this lamp, contains an alarm bell. Also in case an alarm bell is desired in addition to the one associated with the main alarm board, the circuit is so arranged that the second alarm may be provided.

DETAILED DESCRIPTION

OPERATION

3. When the line signal lamp or the cord signal lamp is lighted, the AUX. relay operates, in turn lighting the auxiliary signal lamp. In case the night alarm key is operated, the NA relay will be operated when the auxiliary signal lamp is lighted. The operation of the NA relay rings the night alarm bell.

4. The AUX-1 relay performs the same functions as the AUX relay. The AUX-1 relay is used for multiple line lamps while the AUX relay is used for the non-multiple line lamps, where there are both types of lines in the same panel.

5. In case the fuse which protects the AUX and AUX-1 relay operates, a lamp will be lighted at the section in which the fuse is located. The operation of the fuse also operates the FA relay. The operation of the FA relay causes a lamp to light and an alarm bell to ring, at the main alarm board. When an additional alarm signal is desired, the FAB relay is used which will ring an additional alarm bell.

6. When the line signal lamp or cord signal lamp is extinguished, the AUX or the AUX-1 relay is released, extinguishing the auxiliary lamp, restoring the circuit to normal.

7. When an operated fuse is replaced, the FA and FAB relays release, extinguishing the associated fuse alarm lamp, silencing the bell, and restoring the circuit to normal.

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CIRCUIT REQUIREMENTS

	<u>OPERATE</u>	<u>NON-OPERATE</u>	<u>RELEASE</u>
B9 (AUX), (AUX-1), (FA), (FAB), (NA)	After a soak of approx- imately .3 amp. Test .062 amp. Readj. .054 amp.		After a soak of approx- imately .3 amp. Test .003 amp. Readj. .006 amp.

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CHK'D.-WJT.

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